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May 30, 2007

Dr. Russell Read  
Chief Investment Officer  
California Public Employees' Retirement System  
400 Q Street  
Sacramento, CA 95814

Re: Revision of Global Equity Sub-Asset Class Ranges

Dear Russell,

You requested Wilshire's opinion with respect to Staff's recommendation to increase the minimum, maximum and target allocations to both the RMARS Program and the Corporate Governance Investments Program. Wilshire supports these increases and recommends that the Investment Committee approve the increases.

### **Proposed Changes**

Staff is seeking to expand the acceptable range for both the RMARS Program and the Corporate Governance Investments Program from a target of 3% of Global Equity for each program to a target of 5% of Global Equity for each program. In addition, Staff is proposing that the range be changed from 1-5% (3% +/-2%) for each program to 2-8% (5% +/- 3%). The increased target allocation will allow both Programs to have a greater impact on the total Global Equity portfolio and the increased ranges will allow Staff additional flexibility in managing each program. As noted below, both Programs have been very successful parts of CalPERS' Global Equity portfolio.

### **Background**

The RMARS Program has just over five years of history, with an inception date in April of 2002. The program has grown to nearly \$5 billion as of March 31, 2007 and includes eight different investment strategies. Wilshire conducted an evaluation of the RMARS Program in July of 2006 and assigned a score of 257 points out of 300 possible, or 86%. Over the past five years, the program has earned 9.3% annualized, fully 2% ahead of its benchmark. The information ratio of the Program over this time period was 0.3. Given the turbulent nature of the markets, the RMARS Program's performance has been excellent. The program was designed to offer absolute returns that were not highly correlated with the rest of CalPERS' marketable securities programs. Since inception,

the RMARS program has had a correlation of 0.5 versus the US stock market, -0.2 versus the US bond market and 0.6 versus the international stock market. In addition, the program has provided positive returns in 67% of the months since inception.

As we noted in our evaluation, the RMARS Program makes excellent use of its two outside advisors (PAAMCO and UBS) and the third-party data collector and risk aggregator (IFS). Staff is charged with sector allocation and manager selection, but PAAMCO and UBS provide strategic direction and manager research. Staff also makes use of internal and external risk management tools to examine risk from a variety of angles, including quantitative attribution analysis and holdings-level analysis.

The Corporate Governance Investments Program history stretches back to 1999 with CalPERS' first investment with Relational Investors. The program has grown to just under \$5 billion as of March 31 and now includes eleven different investments along with three co-investment relationships. The Program is geographically diversified with exposure to US, European and Asian markets. In addition, the Investment Committee has granted authority to Staff to seek out Corporate Governance Investments in emerging markets. Over the past five years, the Program has earned 14.6% annualized, 3.7% ahead of its benchmark. The information ratio of the Program over this time period was 0.4.

### **Risk Analysis and Implementation Issues**

The Risk Management Unit has prepared an analysis of the effect on the total fund and on the Global Equity portfolio of each of these changes. Individually, increasing the target allocation to RMARS (holding Corporate Governance constant) from 3% to 5% decreases the total fund's total risk slightly, from 7.39% to 7.32%. This represents a Value at Risk (VAR) decrease of \$271 million. At the maximum limit for the program, the total fund's total risk falls to 7.19%, which is a reduction in VAR of \$775 million. However, the increase in the target allocation represents a potential increase in the Global Equity portfolio's tracking error (as noted earlier, the RMARS program is not highly correlated with global equity markets). The tracking error of the Global Equity portfolio is expected to increase from 0.7% to 0.852%. Therefore, the Performance at Risk (PAR) of the Global Equity portfolio would increase from 1.16% to 1.41%. At the upper limit, the PAR rises to 1.93%.

Taking the Corporate Governance allocation increase individually (holding RMARS constant), the increase in target causes a decrease in the total fund's total risk from 7.39 to 7.38, representing a \$39 million VAR decrease. At the upper limit, the total fund's total risk falls 7.36, representing a decrease in VAR of \$116 million. The PAR increases from 1.16% to 1.20% and further rises to 1.31% at the upper limit of the proposal.

Combined, the increased target allocations would reduce the total fund's total risk level from 7.39% to 7.31%, decreasing further to 7.17% when both programs are modeled at their upper limits. This represents a decrease in VAR of \$310 million at the target

allocations and \$853 million at the upper limits. The PAR rises from 1.16% at the current target to 1.45% at the proposed target and 2.05% at the upper limits.

In essence, while overall risk is reduced due to the increased use of absolute value strategies through RMARS, the Global Equity portfolio will be less like its benchmark, causing an increase in PAR. Wilshire views the decrease in VAR as unambiguously positive, since there is no corresponding reduction in expected returns. The increase in PAR is not inherently good or bad. A higher PAR represents a greater amount of potential value added as well as the potential for greater amounts of underperformance. Using PAR as a risk budgeting tool would suggest “spending” PAR on programs that have the potential to add significant amounts of value. For this reason, Wilshire believes that the RMARS Program and the Corporate Governance Investments Program are good place to increase PAR for the Global Equity portfolio.

From an implementation standpoint, RMARS will be able to allocate a higher dollar amount to any particular fund as the size of the Program grows. This is a result of the structure of the RMARS delegated authority, which allows Staff to allocate up to 8% of the market value of the program to a single fund (10% with CIO approval). Thus, at its current size the RMARS team could allocate roughly \$400 million to a single fund. At the proposed target size, the RMARS team could allocate roughly \$600 million to a single fund. At its maximum size, the RMARS team could allocate \$960 million to a single fund. Obviously, CalPERS could become a much larger part of the assets of a single fund, which brings about certain concentration risks. The RMARS team is well aware of these risks and they are evaluated as part of the ongoing investment process.

The Corporate Governance Investment Program’s delegated authority is based on the assets of the entire Global Equity portfolio, rather than the size of the program. Currently, up to 0.25% of the market value of Global Equity can be allocated to a new investment with a Corporate Governance partner, roughly equivalent to \$375 million. Follow-on investments are subject to the same size limit, which doubles the effective limit that Staff can allocate to a single partner. Increasing the size of the Corporate Governance Investment Program is likely to mean adding new partners, which will cause Staff to seek out and conduct due diligence on new funds. Wilshire feels that Staff has adequate capacity to manage the existing Program and to search for new managers.

In short, increasing the size of each program could mean additional concentration with existing managers or adding new managers as the size of the program grows. We feel Staff has adequate resources to manage the growth of each program and recognize that the growth to the new targets will likely take place at a measured pace.

## **Conclusion**

Wilshire recommends that the Investment Committee authorize the increases in the target allocations and ranges for both the RMARS Program and the Corporate Governance Investments Program. Both Programs have outperformed their respective benchmarks.

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The overall risk of the total fund will slightly decrease as a result of the proposed changes, although the tracking error of the Global Equity composite is expected to rise. There are practical considerations when increasing the size of each of these portfolios, but Wilshire feels that Staff has the resources and capacity to manage the growth of each program.

Should you require anything further or have any questions, please do not hesitate to contact us.

Best regards,

A handwritten signature in black ink, appearing to read "Alan Jinn". The signature is fluid and cursive, with a large loop at the end.